

Forestland Interpretations

Forestland interpretations are important to good management. The management of trees begins with an understanding of the soil where they grow or are to be grown. Some soils are very suitable for growing wood crops; others barely support tree cover. Different tree species may vary in production on the same soil.

Forestland interpretations should be used to assist land users in planning, installing, and maintaining forestland management systems.

Forest Management and Productivity

The Forestland Management and Productivity tables presents information about suitable for producing timber for each soil map unit. Management concerns, which include hazard of erosion, equipment use, seedling mortality, and windthrow hazard, are listed by ratings of SLIGHT, MODERATE, or SEVERE. Information on potential productivity includes plant competition, common trees, site index, productivity class, and trees to plant.

Management Concerns

EROSION HAZARD - the risk of erosion is slight if the expected soil loss is small; moderate if some measures are needed to control erosion during logging; and severe if intensive management or special equipment and methods are needed to prevent excessive loss of soil.

EQUIPMENT LIMITATION - A rating of slight indicates that use of equipment is not limited to a particular kind of equipment or time of year; moderate indicates a short seasonal limitation, or a need for some modification in management of equipment; and severe indicates a seasonal limitation, a need for special equipment or management, or a hazard in the use of equipment.

SEEDLING MORTALITY - The ratings are for seedlings from a good planting stock that are properly planted during a period of sufficient rainfall. A rating of slight indicates that the expected mortality of the planted seedlings is less than 25 percent; moderate - 25 to 50 percent; and severe - more than 50 percent.

WINDTHROW HAZARD - A rating of slight indicates that trees in wooded areas are not expected to be blown down by commonly occurring winds; moderate - that some trees are blown down during periods of excessive soil wetness and strong winds; and severe that many trees are blown down during periods of excessive soil wetness and moderate or strong winds.

PLANT COMPETITION - A rating of slight indicates little or no competition from other plants; moderate indicates that plant competition is expected to hinder the development of the fully stocked stand of desirable trees; and severe means that plant

competition is expected to prevent the establishment of a desirable stand unless the site is intensively prepared, weeded, or otherwise managed for the control of undesirable plants.

POTENTIAL PRODUCTIVITY - This is discussed under the ordination class symbol.

COMMON TREES - Trees that generally occur on the soil are listed regardless of economic importance.

SITE INDEX AND PRODUCTIVITY CLASS - These are discussed under ordination class symbol.

TREES TO PLANT - Trees that are suitable for commercial wood production and that are adapted to the soil.

See the National Forestry Manual, Subpart B for criteria used in rating management concerns.

This subsection includes:

- **(a) Forest Management (one or two tables)**

Adair County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
14C2: Armstrong-----	northern red oak----	55	43	eastern white pine, European larch, red pine, sugar maple
	white oak-----	55	43	
14D2: Armstrong-----	northern red oak----	55	43	eastern white pine, European larch, red pine, sugar maple
	white oak-----	55	43	
16C: Bevier-----	white oak-----	55	43	eastern white pine, white oak
17E2: Purdin-----	black oak-----	---	0	black oak, northern red oak, white ash, white oak
	blackjack oak-----	---	0	
	post oak-----	---	0	
	white oak-----	60	43	
17F2: Purdin-----	black oak-----	---	0	black oak, northern red oak, white ash, white oak
	blackjack oak-----	---	0	
	post oak-----	---	0	
	white oak-----	60	43	
19E: Vanmeter-----	white oak-----	45	29	eastern white pine, red pine

Adair County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
19F: Vanmeter-----	white oak-----	45	29	eastern white pine, red pine
22B: Adco-----	---	---	---	---
23D2: Gorin-----	black oak----- northern red oak---- white oak-----	61 62 53	43 43 43	black oak, northern red oak, white oak
Winnegan-----	black oak----- blackjack oak----- post oak----- white oak-----	--- --- --- 60	0 0 0 43	black oak, northern red oak, white ash, white oak
24D2: Gara-----	northern red oak---- white oak-----	55 55	43 43	eastern white pine, northern red oak, red pine, white oak
24E2: Gara-----	northern red oak---- white oak-----	55 55	43 43	eastern white pine, northern red oak, red pine, white oak

Adair County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
24F2: Gara-----	northern red oak---- white oak-----	55 55	43 43	eastern white pine, northern red oak, red pine, white oak
26B2: Leonard-----	---	---	---	---
28E2: Winnegan-----	black oak----- blackjack oak----- post oak----- white oak-----	--- --- --- 60	0 0 0 43	black oak, northern red oak, white ash, white oak
28F: Winnegan-----	black oak----- blackjack oak----- post oak----- white oak-----	--- --- --- 60	0 0 0 43	black oak, northern red oak, white ash, white oak
31: Putnam-----	---	---	---	---
40: Arbela-----	---	---	---	---
43: Chariton-----	---	---	---	---
44B: Gifford-----	---	---	---	---

Adair County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
44C2: Gifford-----	---	---	---	---
46: Vesser-----	---	---	---	---
47: Zook-----	---	---	---	---
49: Dockery-----	pin oak-----	76	57	eastern cottonwood, pecan, pin oak
Tice-----	eastern cottonwood--	---	0	American sycamore,
	pin oak-----	96	72	cherrybark oak,
	sweetgum-----	86	100	eastern
	tuliptree-----	90	86	cottonwood, green
	Virginia pine-----	90	129	ash, red maple,
	white ash-----	---	0	tuliptree
54B: Vigar-----	---	---	---	---
55B: Vigar-----	---	---	---	---
Zook-----	---	---	---	---
Excello-----	---	---	---	---

Adair County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
56: Wabash-----	pin oak-----	75	57	eastern cottonwood, pecan, pin oak
57: Floris-----	eastern cottonwood-- white oak-----	105 63	143 43	eastern cottonwood, eastern white pine, red pine, Scotch pine, white oak
69: Floris-----	eastern cottonwood-- white oak-----	105 63	143 43	eastern cottonwood, eastern white pine, red pine, Scotch pine, white oak
71C: Plainfield-----	black cherry----- black oak----- northern red oak---- white oak-----	--- 70 --- 55	0 57 0 43	eastern white pine, jack pine, red pine
71F: Plainfield-----	black cherry----- black oak----- northern red oak---- white oak-----	--- 70 --- 55	0 57 0 43	eastern white pine, jack pine, red pine

Adair County, Missouri
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
AED: Orthent-----	---	---	---	---
M-W: Water-----	---	---	---	---
W: Water-----	---	---	---	---